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Functionalized graphene sensors for real time monitoring fermentation processes

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Stellingen

Behorende bij het proefschrift

Functionalized graphene sensors for real time monitoring fermentation processes

Electrochemical and chemiresistive sensors

van Selvaraj Chinnathambi

1. It is important to continuously bring in new technology to the industrial processes for efficient process control and productivity.
2. Sometimes there is a simple scientific solution to the complicated problems (chapter 3).
3. The chemoresistive sensor can be used to detect analytes dissolved in a solution, provided the source and drain electrodes are not exposed to the solution. (Chapter 3 – 5)
4. When voltammetric techniques are used for pH measurements, the test solution must be free from dissolved oxygen. (Chapter 4)
5. When new scientific concepts are developed the amount of data needed to prove that the results are not because of some other factors is more enormous than that related to the concept itself.
6. Graphene is a most versatile material that can be used for many applications with proper tuning of its properties via surface functionalization.
7. The 3D printing technology offers an extra dimension to the scientific community for development of innovative designs.
8. Observation is critical for creating innovative ideas for the success of any scientific experiment.